(C) WPI/Derwent

AN - 1995-057294 [42]
AP - JP19930159892 19930526
CPY - GLOB-N
DC - B05
DR - 0009-S
FS - CPI
IC - A61K31/215
MC - B07-A03 B10-C04B B14-H01
M1 - [01] H4 H401 H481 H8 J0 J014 J1 J171 J2 J273 M280 M312 M323 M331 M342 M349 M381 M393 M423 M510 M520 M530 M540 M903 M904 N152 P633 V742; R00009-Q R00009-U
PA - (GLOB-N) GLOBAL ART KK
PN - JP6336427 A 19941206 DW199508 A61K31/215 009pp
PR - JP19930159892 19930526
XIC - A61K-031/215
AB - J06336427 Drug comprises (a) straight chain condensed substance of L-lactic acid having a condensn. deg. of 5-25 and (b) cyclic condensed substance of L-lactic acid having a condensn. deg. of 2-15, obtd. by (1) heating L-lactic acid normal or reduced pressure in an atmos. of inert gas e.g. N2, (2) dissolving the reacted soln. in ethanol or methanol, and (3) cooling, (4) filtering, (5) dissolving in acetonitrile, or dissolving in acetonitrile and subjecting to reverse phase chromatography using a ODS or DS column equilibrated with 25 % acetonitrile soln. (pH2-3), (6) eluting with 30-50% acetonitrile soln. (pH2-3), (7) eluting with 70% or more acetonitrile soln. (pH2-3), and (8) collecting a fraction.

- USE/ADVANTAGE - The drug is useful for the treatment of malignant tumours, and may be safely administered and produced at higher productivity. Strong activity is shown against VX2 tumour cells derived from rabbit hepatic tumour. Acute toxicity test with mouse and rabbit show lower toxicity than adriamycin.
- In an example, L-lactic acid (500ml) was heated in a flask in a N2 atmos. at 145 deg. C at normal pressure for 3 hrs., heated at reduced pressure (150mmHg) for 2 hrs., heated at 155 deg. C at 100 mmHg for 2 hrs., and heated at 185 deg.C for 1.5 hrs. The obtd. condensed substance (low degree) was suspended in 2-times methanol, filtered, dried, dissolved in acetonitrile, subject to reverse ODS column equilibrated with acetonitrile 25% HCl acidic soln. (pH2.0), and eluted with 25%, 50%, and 100% acetonitrile HCl soln. in a stepwise process. The obtd. fraction was neutralised, substd. with ethanol, dried, and dissolved in propyleneglycol to form agents 1,2, and 3. The agent 3 (100 mg) was dissolved in propyleneglycol (1m1), and administered to patients with malignant tumour at 30mg/kg by intravenous drop. Tumour contraction and improved symptoms were found for patients with cancers in the stomach, thyroid gland, uterus, and lungs.(Dwg.0/3)

CN - R00009-Q R00009-U
IW - DRUG INHIBIT GROWTH MALIGNANT TUMOUR CELL COMPRISE STRAIGHT CHAIN CONDENSATION SUBSTANCE LACTIC ACID CYCLIC CONDENSATION SUBSTANCE

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LACTIC ACID
IKW - DRUG INHIBIT GROWTH MALIGNANT TUMOUR CELL COMPRISE STRAIGHT CHAIN
CONDENSATION SUBSTANCE LACTIC ACID CYCLIC CONDENSATION SUBSTANCE
LACTIC ACID
NC - 001
OPD - 1993-05-26
ORD - 1994-12-06
PAW - (GLOB-N) GLOBAL ART KK
TI - Drug for inhibiting growth of malignant tumour cells - comprises straight chain condensed substance of L-lactic acid and cyclic condensed substance of L-lactic acid